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# SPHECIDAE (HYMENOPTERA) FROM JORDAN INCLUDING A NEW SPECIES OF *CRABRO*

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A b s t r a c t : 72 species of Sphecidae collected by J. Gusenleitner and K.M. Guichard are published from Jordan. *Crabro jordanicus* n.sp. is described as new.

## Introduction

If any serious collecting of Sphecidae has taken place in Jordan, it is not apparent in the literature and when I was in Amman in 1979 no significant collections of hymenoptera were seen. Therefore when I was able to examine an interesting lot of Jordan sphecids collected by Dr. J. Gusenleitner of Linz (Austria) it seemed an appropriate time to add these records to some of my own from that country and to publish them.

Although the sphecid fauna of Israel to the west of Jordan has been relatively well collected, all the other adjacent faunas, especially that of Arabia, are poorly known.

Localities:

Dr. J. Gusenleitner 1989

JG1 Qa "Disi, 8 kms. E. of Wadi Rum, 8.IV. - JG2 Aqaba, 1.IV. - JG3 13 kms. S. of Aqaba, 3.IV. - JG4 15 kms. S. of Aqaba, 3.IV. - JG5 Aqaba, 9.IV. - JG6 80 kms. NE Aqaba (road to Amman), 11, 13, 8.IV. - JG7

70 kms. NE Aqaba (road to Amman), 4, 12.-14.IV. - JG8 Fidan, 125 kms. N of Aqaba, 6.IV. - JG9 Wadi Rum, 5, 10.IV.

K. M. Guichard, 1979 u. 1986

KG1 below Salt 100 m, 3.IV.79. - KG2 Wadi Shweib Dam below Salt, 2.IV.79. - KG3 Jerash 600 m, 30.III.79. - KG4 Amman, 29.III.79. - KG5 Aqaba, 6.-10.III.86. - KG6 Petra, 28.II.-4.III.86. - KG7 Zai National Park, 4.IV.79.

## List of Species

*Chlorion hirtum* KOHL. 6 ♂, KG5

*Chlorion funereum* GRIBODO. 2 ♀, ♂, KG5. Taken at the same *Ochradenus* flowers as *C hirtum*.

*Ammophila erminea* KOHL. ♂, JG1; ♂, JG2; ♀, JG3.

*Ammophila gracillima* TASCHENBERG. ♂, JG5.

*Ammophila honorei* ALFIERI. ♂♀, JG6

*Ammophila insignis egregia* MOCSARY. ♂, JG4

*Ammophila fallax* KOHL. 10 ♀, 3 ♂, KG3

*Ammophila assimilis* KOHL. 3 ♂ 2 ♀, KG6; ♂♀, KG7

*Podalonia affinis* KIRBY. 2 ♀, JG7; ♂, KG6

*Podalonia ebenina* SPINOLA. ♀, JG7

*Podalonia tydei* (LE GUILLOU). ♂, KG6

*Podalonia maris-mortui* (BYTINSKI-SALZ). 4 ♀, ♂ (red-bodied), KG6

*Prionyx niveatus* DUFOUR. ♀, JG2

*Philanthus triangulum* LINNAEUS. 3 ♂, KG5

*Philanthus coarctatus* SPINOLA. 2 ♀, 3 ♂, KG5

*Philanthus genalis* KOHL. 7 ♀, KG5

*Eremiasphecium steppicola* (TSUNEKI). 2 ♀, KG5. The type, a unique female, comes from Mongolia. The Jordan specimens clearly differ from *E. schmiedeknechti* KOHL, *E. steppicola* MARSHAKOV and all the Gussakovsky species either by the front tarsal segments, the pygidium or the round shape of the head. TSUNEKI's (1972) illustrations of *E. steppicola* easily identify the Aqaba specimens which were caught on some *Ochradenus* flowers trailing on sandy soil.

*Cerceris pallidula* MORICE. 2 ♂, JG2

*Cerceris* aff. *eugenia* SCHLETTERER. ♂, JG2

*Cerceris canaliculata palaestina* BEAUMONT. ♂♀, JG6

*Cerceris rubida pumilio* GINER MARI. ♂, Amman Airport 700 m, 9.VIII. 1986, R. Hensen

*Cerceris buprestícida* DUFOUR. ♂, KG2

*Cerceris rutila mavromoustakisi* GINER MARI. ♀, KG3

*Cerceris spinipectus* F. SMITH. ♂, KG2

*Ammatomus rogenhoferi* (HANDLIRSCH). 3 ♂♀, KG1

*Pseudoscolia dewitzi* (KOHL). ♀, KG1; 5 ♂, 4 ♀, JG8

*Pseudoscolia angelae* (KOHL). 3 ♂, 2 ♀, JG8

*Prosopigastra genicularis* (F. MORAWITZ). 2 ♂, JG8

*Prosopigastra handlirschi* MORICE. 2 ♂, KG1 & KG2

*Prosopigastra* sp.? ♀, JG9. Sent to W.J. Pulawski for comment.

*Synnevrus decemmaculatus* (SPINOLA). 4 ♂, KG1

*Palarus histrio* SPINOLA. 2 ♂, 2 ♀, JG8

*Dinetus nabateus* BEAUMONT. ♂, JG8

*Dryudella bifasciata* (SCHULTHESS). 2 ♀, JG8

*Bembecinus decoratus* GUICHARD. ♂♀, JG8

*Bembecinus peregrinus* (F. SMITH). 4 ♂, KG1

*Bembix chlorotica* SPINOLA. ♂, JG8

*Bembix rufiventris* PRIESNER. ♂, JG2; 18 ♂, ♀, KG5

*Bembix oculata* PANZER. ♀, KG5

*Stizus ruficornis* (J. FORSTER). ♂, KG2; 4 ♂, KG5. The range of colour plattern in *S. ruficornis* is bewildering. The male from KG2 has a yellow scutellum, black abdomen with broad yellow bands on the tergites, that on T1 reduced to dots and that on T2 broken. The four males from KG5 have black scutellums, blackish tergites except T2 and T3 which are entirely yellow; the wings are yellowish with well defined dark apical patches.

*Liris atrata* (SPINOLA). 2 ♀, ♂, JG7

*Liris nigra* (FABRICIUS). 2 ♀, JG6; ♀, KG6

*Tachysphex schmiedeknechti* KOHL. 2 ♂, JG4; ♂♀, KG5

*Tachysphex brevipecten* BEAUMONT. 3 ♂, JG8

*Tachysphex geniculatus* (SPINOLA). ♂, JG2; ♀, KG5

*Tachysphex nitidus* (SPINOLA). ♂♀, JG6

*Tachysphex panzeri* (VANDER LINDEN). ♂, JG7

*Tachysphex fulvitarsis* (A. COSTA). ♂, JG6

*Tachysphex melas* KOHL. 3 ♂, 5 ♀, JG7

*Tachysphex nitidissimus* BEAUMONT. 6 ♂, 4 ♀, KG5

*Tachysphex incertus* (RADOSZKOWSKI). 3 ♂, KG5

*Tachysphex quadrifurci* PULAWSKI. ♂, KG5
*Tachysphex helveticus* KOHL. ♀, KG5
*Miscophus imitans* GINER MARI. 2 ♀, 9 ♂, KG5; 3 ♀, JG7; ♂♀, JG8
*Miscophus ctenopus* KOHL. ♂♀, KG5
*Miscophus alfierii* HONORE. ♂, JG6
*Miscophus eatoni* E. SAUNDERS. ♂, JG7
*Miscophus specularis* ANDRADE (?). ♂, JG9
*Miscophus nigripes* HONORE. 3 ♂, JG9
*Solierella dispar* PULAWSKI, ♂♀, JG2
*Solierella* aff. *sebrai* ANDRADE. ♀, JG8
*Solierella* aff. *syriaca* BEAUMONT. 3 ♂, KG5
*Solierella compedita* (PICCIOLI). ♂, KG5
*Solierella pectinata* PULAWSKI. 3 ♂, 3 ♀, JG8
*Diodontus temporalis* KOHL. ♂♀, KG4
*Diodontus* ssp.? Several small species from Petra and Aqaba remain undetermined pending a revision of the genus by BUDRYS (USSR).
*Oxybelus quattuordecimnotatus* JURINE. ♂♀, Amman 800 m, 6.VI.1958, J. Klapaperich
*Oxybelus collaris* KOHL. ♀, 6 ♂, KG5
*Oxybelus arabicus* GUICHARD. ♀, 5 ♂, KG5
*Oxybelus subspinosus* KLUG. ♂, Amman 800 m, 6.VI.1958, J. Klapperich
*Oxybelus* aff. *variegatus* WESMAEL. ♂, JG1

***Crabro jordanicus* sp.nov.**

Holotype: ♂. Jordan: 80 km NE Aqaba (Straße nach Amman), 15.IV.1989, J. Gusenleitner (in coll. Gusenleitner, Linz). Paratypes ♂ 4 ♀ as holotype (in coll. Gusenleitner 2 ♀; Guichard ♂♀; Leclercq ♀).

Holotype ♂: Black with the following parts yellow - Mandibles except tips, lateral circular spots on clypeus, front of scape, part tegulae and precostal plates, rear half of humeral tubercles, postscutellum, paler lateral sutures, most of tibiae and tarsi and the base of front and middle femora, T1-6 with broad apical bands, those of T1-3 indented in middle, T7 with yellow base, S2-4 with curved apical pattern. Inflated area of foretibiae milky white with black distal spot (fig.1). Wings slsightly infuscate; wing veins brown.

Mandibles simple. Clypeus covered with dense silver pubescence hiding the ground, the apical margin widely and shallowly excavated with lateral

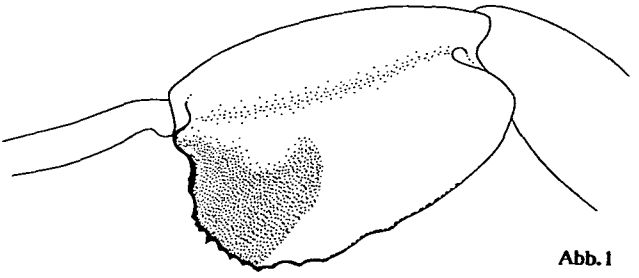

Abb. 1

indentations forming a small tooth. Antennae simple with pale hair fringe beneath. AS13 gently curved and longer than AS12. Orbits strongly converging to clypeus, margined with dense silver pubescence directed forwards. Front and top of head densely, unevenly and coarsely punctate, a depression in front of each ocellus; orbital foveae short and dull. Pronotum densely and coarsely punctate, with broad lateral projections and with a shallow central impression. Scutum shining with short erect pale pubescence, coarsely and densely punctate, more so than top of head, less densely in front of scutellum which has scattered large punctures. Postscutellum curved with uneven surface. Dorsal area of propodeum shining and with a confused irregular surface and an ill-defined central longitudinal channel, laterally with longish white pubescence. Mesopleurae strongly shining with a faint glaucous bloom and coarse uneven punctation. Front femora flattened and a little excavated beneath with a small spine at the base, externally flat, minutely punctate and with white pubescence; trochanters roundly angled. Foretibiae (fig.1). S2-5 with outstanding pale lateral setae. Mesopleurae with a point in front of the coxae.

Female. Colour similar to male but yellow replaced by cream, bands on tergites more broken. Mandibles with a small internal tooth in the basal half. Punctation on head and thorax finer than in male. Orbital foveae broader and more defined. Foretibiae gently expanded, externally with four pale spines in apical half; fore metatarsi with six pale external spines. Clypeus viewed from in front with a narrow shining apical channel, the remainder hidden by pubescence. Antennae simple, As3 longer than AS4. Lateral angles of pronotum with a narrow translucent carina. Pygidium with coarse confused punctation and dense pale setae in the apical half. S2 with two dull pubescent more or less circular areas. Length male and female 12 mm.

A pair of this *Crabro* was submitted to Professor J. Leclercq who considered it to be a new species and kindly gave Russian references. In BOHART and MENKE's key to *Crabro* (1976) it runs down to the *C. filiformis* group comprising two species, *C. filiformis* RADOSZKOWSKI and *C. gussakovskiji* R. BOHART (= *C. mongolicus* TSUNEKI 1959). MARSHOKOV (1977) places *C. gussakovskiji* in the new subgenus *Othyreus* which has the tips of the mandibles bidentate. In that paper *C. jordanicus* runs to the subgenus *Synothyreus* with the mandibles apically simple and with only two species, *C. filiformis* and *C. pubens*. From the latter *C. jordanicus* is easily distinguished by its concave occiput and the clypeus without median teeth, characters shared by *C. filiformis* to which it is clearly related. *C. jordanicus* is distinguished from *C. filiformis* by the very different shapes of the clypeus and by the different pattern of the tibial 'plate' although its shape and that of the pronotum is similar. The distribution of *C. filiformis* is Turkmenia, Tadzhikistan and SE Kazakhstan.

KAZENAS (1984) described a third species of *Synothyreus*, *S. marshakovi* from East Kazakhstan with a different clypeus, a fully reddish abdomen with a full yellow pattern and with a pronotal collar with the lateral angles acuminate.

## Zusammenfassung

72 Grabwespenarten aus Jordanien, aufgesammelt von J. Gusenleitner, Linz (1989) und K.M. Guichard, London (1979 und 1986) werden veröffentlicht, darunter die neue Art *Crabro jordanicus* n.sp.

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